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Book Reviews

B. SCHOENEBERG, *Elliptic Modular Functions*, Springer, 1974, 233 pp. The more books are written on elliptic functions, the better. The field is difficult enough without texts. This one requires comparatively little background in algebra and will appeal to the analyst.

W. F. DONOGHUE JR., *Monotone Matrix Functions and Analytic Continuation*, Springer, 1974, 179 pp. The first account of a class of momentlike results initiated by Charles Loewner. The interplay between order properties of the reals and analytic properties of resolvents, the protagonist of this book, makes the most elegant chapter of functional analysis.

F. SUPPE (Ed.), *The Structure of Scientific Theories*, Illinois, 1974, 682 pp. These accounts of current analytic–philosophical views on science should be required reading for all scientists. But how many will do more than browse through it? Some philosophers are becoming sophisticated enough that their theorizing no longer appears as the Johnny-come-lately it once was, and it may even be relevant in physics.

I. I. GIHMAN AND A. V. SKOROHOD, *The Theory of Stochastic Processes*. I, Springer, 1974, 570 pp. The first thorough text on stochastic processes since Doob. The slightly conservative notation will probably enable the book to be read by a wider public. Why is it that so many of the best-written textbooks seem to be translated from the Russian?

R. M. SWITZER, *Algebraic Topology–Homotopy and Homology*, Springer, 1975, 526 pp. Textbooks in topology are at last beginning to appear. Perhaps in a few years the subject will begin to find applications. This one is advanced, yet well-written enough so that one can dig out the meaning of a theorem even without a three-year course in topology.

M. L. SILVERSTEIN, *Symmetric Markov Processes*, Springer, 1974, 287 pp. A well-written complement to the growing literature on Markov processes, thorough and accessible. Based on the work of M. Fukushima.

H. H. SCHAEFER, *Banach Lattices of Positive Operators*, Springer, 1974, 376 pp. Not only thorough, but lucid and impeccably complete. Easily accessible to analysts of all backgrounds. If more books were written in this vein, pure mathematics might well be found to have a much broader variety of applications.

L. H. KOOPMANS, *The Spectral Analysis of Time Series*, Academic Press, 1974, 366 pp. An unusual blend of theory and applications, including the difficult multivariate theory that was Wiener's last mathematical work (with Masani). Why there should be two parallel terminologies for the same structure, namely, Hilbert space and time series, is a mystery, which, it is hoped, some historian of mathematical *quid pro quos*, will someday unravel.